

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,906	04/09/2007	Pentti Hyvarinen	PLA077-236676	8810
WOLF, BLOCK, SHORR AND SOLIS-COHEN LLP 250 PARK AVENUE			EXAMINER	
			KIKNADZE, IRAKLI	
10TH FLOOR NEW YORK, NY 10177		ART UNIT	PAPER NUMBER	
			2882	
		·	NOTIFICATION DATE	DELIVERY MODE
			01/29/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO@WOLFBLOCK.COM

	•				
	Application No.	Applicant(s)			
•	10/595,906	HYVARINEN ET AL.			
Office Action Summary	Examiner	Art Unit			
	Irakli Kiknadze	2882			
The MAILING DATE of this communication Period for Reply	n appears on the cover sheet w	rith the correspondence address			
A SHORTENED STATUTORY PERIOD FOR RIWHICHEVER IS LONGER, FROM THE MAILIN - Extensions of time may be available under the provisions of 37 CI after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory provided to reply within the set or extended period for reply will, by any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUN FR 1.136(a). In no event, however, may a n. eriod will apply and will expire SIX (6) MO statute, cause the application to become A	ICATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on	18 Mav 2006.	·			
•	This action is non-final.				
3) Since this application is in condition for all	· · · · · · · · · · · · · · · · · · ·				
Disposition of Claims					
4) ⊠ Claim(s) 1-22 is/are pending in the application 4a) Of the above claim(s) is/are with 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-22 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and sub	ndrawn from consideration.				
Application Papers	÷				
9)☐ The specification is objected to by the Exa	miner.				
10)⊠ The drawing(s) filed on <u>18 May 2006</u> is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to	= · ·				
Replacement drawing sheet(s) including the condition 11) The oath or declaration is objected to by the					
Priority under 35 U.S.C. § 119	. *	•			
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of: 1. Certified copies of the priority docur 2. Certified copies of the priority docur 3. Copies of the certified copies of the application from the International But * See the attached detailed Office action for a	ments have been received. ments have been received in a priority documents have been ureau (PCT Rule 17.2(a)).	Application No n received in this National Stage			
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-94: 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5/18/2006.	8) Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application			

10/595,906 Art Unit: 2882

DETAILED ACTION

Claim Objections

1. Claims 1-22 are objected to because of the following informalities:

Claim 1, in line 10, the recitation "ori-entation" should read --orientation--.

Claim 4, in line 2, the recitation "imag-ing" should read --imaging--.

Claim 7, in line 3, the recitation "struc-ture" should read --structure--.

Claim 11, in line 3, the recitation "con-sist" should read --consist--.

Claim 13, in line 2, the recitations "appare-tus" and "stru-cture" should read -apparatus-- and --structure--; in line 6, the recitation "in-cludes" should read --includes--;
in line 8, the recitation "ro-tated" should read --rotated--.

Claim 19, in line 2, the recitation "posi-tion" should read --position--.

Claim 20, in line 2, the recitation "posi-tion" should read --position--; in line 3, the recitation "essen-tially" should read --essentially--

Claims 16-22 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim 16. See MPEP § 608.01(n). Accordingly, the claims 16-22 not been further treated on the merits. Additionally claim 16 depends on itself.

The claims 1-22 are objected to because they include reference characters which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same

Application/Control Number:

10/595,906 Art Unit: 2882

element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 7, 8, 11 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 7, the phrase "like 1-5 cm" renders the claim indefinite because it is unclear whether the limitations following the phrase "like" are part of the claimed invention.

Claim 8 recites the limitation "the distance from the focus" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 11, the phrase "may" renders the claim indefinite because it is unclear whether the limitations following the phrase "may" are part of the claimed invention.

Regarding claim 14, the phrase "may be rotated" renders the claim indefinite because it is unclear whether the limitations following the phrase "may be" are part of the claimed invention. See MPEP § 2173.05(d).

Application/Control Number:

10/595,906 Art Unit: 2882

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by McKenna (US Patent Application Publication 2005/0100129 A1).

With respect to claim 1, McKenna teaches a mammography imaging apparatus, (see Figs. 1-4) comprising an essentially vertically standing body part and an arm structure in connection with it, being turnable with respect to a horizontal rotating

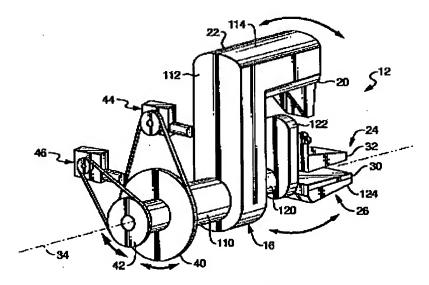


FIG. 3

axis

(34), a radiation source

(20) on one hand and image data receiving means (30) on the other hand being placed

10/595,906 Art Unit: 2882

at essentially opposite ends of the arm structure, which arm structure includes at least two arm parts (22 and 26) orientating essentially parallel and means for changing the mutual orientation of at least a first and a second of the at least two arm parts, wherein the apparatus includes first means (40 and 44) for turning at least the first arm part (22) around a horizontal axis and that to the second arm part (26) is arranged second means (42 and 46) with help of which, when turning the first arm part (22), it is possible both to maintain the orientation of the second arm part (26) with respect to the first arm part (22) and to turn the second arm part (26) in a different direction and/or at a different angular velocity with respect to the movement of the first arm part (22) (see paragraphs 0020, 0022 and 0029).

With respect to claim 2, McKenna teaches that a first actuator (40 and 44), which construction is arranged for turning the arm structure as a whole with respect to a horizontal axis (34) (Fig. 3; paragraph 0029).

With respect to claim 3, McKenna teaches that second means contain construction containing a second actuator (42 and 46) for turning the arm parts (26) with respect to at least one other arm part (22) (Fig. 3; paragraph 0029).

With respect to claim 4, McKenna teaches that the arm part (22) contains a radiation source (20) of the imaging apparatus and the second arm part (26) contains means for receiving image data (30) (Figs. 1-4; see paragraphs 0020 and 0021).

With respect to claim 5, McKenna teaches that the second actuator (42 and 46) is arranged to the second arm part (26) (Fig. 3; see paragraph 0029).

With respect to claim 6, McKenna teaches that the second arm part (26) contains a lower shelf structure having at least an essentially planar upper surface, essentially in direction of its pivot axis (see Figs. 1-4).

With respect to claim 7, McKenna teaches that the pivot axis of the second arm part (26) is arranged at a small distance (see Figs. 1-4).

With respect to claim 8, McKenna teaches that the dimensions of the arm structure are arranged such that when the arm parts (22 and 26) are orientated essentially parallel (see Figs. 1-4).

With respect to claim 9, McKenna teaches that the pivot axis of the second arm part (26) is arranged to coincide with the pivot axis of the first arm part (22) (see Figs. 1-4).

With respect to claim 10, McKenna teaches that the second arm part (26) contains a compression structure (24), which positions the tissue to be imaged into the imaging area (see paragraphs 0022 and 0024).

With respect to claim 11, McKenna teaches that the compression structure contains an upper compression plate and a lower compression plate, the second arm part (26), which contains the image data receiving means (30) (Figs. 1-4; see paragraphs 0022 and 0024).

With respect to claim 12, McKenna teaches that the imaging apparatus includes a control arrangement via which the said actuators M, M' are arranged to be programmatically drivable.

With respect to claim 13, McKenna teaches a method for turning an arm structure of a mammography imaging apparatus, which arm structure comprises a

vertical base part and a structure in connection with it that is turnable with respect

to a horizontal rotating axis (34), which structure has on one hand a radiation source

(20) and on the other hand image data receiving means (30) located essentially at the

opposite ends of it, which arm structure includes at least two arm parts orientating

essentially parallel, and means for changing mutual orientation of at least a first and a

second of the at least two arm parts, wherein while the first arm part (22) is rotated

around a horizontal axis, the second arm part (26) is rotated either in the same direction

at a different angular velocity, or in the opposite direction (see paragraphs 0020, 0022

and 0029).

With respect to claim 14, McKenna teaches that the first arm part is rotated by the actuator (Fig. 3; see paragraph 0029).

With respect to claim 15, McKenna teaches that the second arm part is rotated by an actuator integrated to the arm part (Fig. 3; see paragraph 0029).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irakli Kiknadze whose telephone number is 571-272-2493. The examiner can normally be reached on 9:00-5:30.

10/595,906

Art Unit: 2882

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on 571-272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Irakli Kiknadze Examiner Art Unit 2882

IK January 15, 2008